

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended): A system for detecting discontinuously transmitted (DTX) frames comprising:

first means for receiving data transmitted in a plurality of frames;

second means for classifying each of the frames;

third means for analyzing the classification of a number of successive frames of the received data and providing a metric with respect thereto; and

fourth means, responsive to the metric, for determining if a frame is a discontinuously transmitted DTX frame, including reclassifying improperly classified erasure frames to be DTX frames.

2 (currently amended): The invention system of [[C]]claim 1 wherein the second means includes means for error checking the frames.

3 (currently amended): The invention system of [[C]]claim 2 wherein the means for error checking includes means for performing a cyclic redundancy check.

4 (currently amended): The invention system of [[C]]claim 3 wherein the second means includes means for classifying the frames as good frames, erasure frames, or discontinuous frames-DTX frames.

5 (currently amended): The invention system of [[C]]claim 4 wherein the third means includes a filter.

6 (currently amended): The invention system of [[C]]claim 5 further including means for assigning a numerical value to each of the frames based on the classification thereof.

7 (currently amended): The invention system of [[C]]claim 6 wherein the filter is of the form $Y_n = Y_{n-1} + X_n$ where 'n' is a frame number, Y_n is the filter output for a given frame n, Y_{n-1} is the filter output for a previous frame, and X_n is a stream of input frames.

8 (currently amended): The invention system of [[C]]claim 7 further including means for setting a threshold for the output Y_n of the filter.

9 (currently amended): The invention system of [[C]]claim 8 further including means for outputting an indication of a detection of a discontinuous transmission DTX frame when the filter output exceeds the threshold.

10 (cancel).

11 (currently amended): The invention system of [[C]]claim [10]] 8 wherein the fourth means for reclassifying frames includes means for changing the frame classification reclassifies an improperly classified erasure frame to be discontinuous a DTX frame if the frame was classified as an erasure frame and the output of the filter exceeds the threshold.

12 (currently amended): A communications system comprising:

a transmitter adapted to transmit frames of data, at least some of the frames being discontinuous transmission (DTX) frames;

a receiver adapted to receive and classify the transmitted frames;

a processor; and

software running on the processor for analyzing the classification of a number of successive frames of the received data and providing a metric with respect thereto, and for determining, in response to the metric, if a frame is a discontinuously transmitted frame, and for reclassifying improperly classified erasure frames to be DTX frames.

13 (currently amended): The invention communications system of [[C]]claim 12 wherein the system includes an error checking mechanism.

14 (currently amended): The invention communications system of [[C]] claim 13 wherein the error checking mechanism includes means for performing a cyclic redundancy check.

15 (currently amended): The invention communications system of [[C]] claim 14 wherein the system includes means for classifying the frames as good frames, erasure frames, or discontinuous DTX frames.

16 (currently amended): The invention communications system of [[C]] claim 15 wherein the software includes a filter.

17 (currently amended): The invention communications system of [[C]] claim 16 wherein the software further includes means for assigning a numerical value to each of the frames based on the classification thereof.

18 (currently amended): The invention communications system of [[C]] claim 17 wherein the filter is of the form $Y_n = Y_{n-1} + X_n$ where 'n' is a frame number, Y_n is the filter output for a given frame n, Y_{n-1} is the filter output for a previous frame, and X_n is a stream of input frames.

19 (currently amended): The invention communications system of [[C]] claim 18 further including means for setting a threshold for the output Y_n of the filter.

20 (currently amended): The invention communications system of [[C]] claim 19 further including means for outputting an indication of a detection of a discontinuous transmission DTX frame when the filter output exceeds the threshold.

21 (cancel).

22 (currently amended): The invention communications system of [[C]] claim [[21]] 20 wherein the means for reclassifying frames includes means software operates for changing the frame classification to discontinuous DTX if the frame was classified as erasure and the output of the filter exceeds the threshold.

23 (currently amended): A method for detecting discontinuous transmission (DTX) frames including the steps of comprising:

receiving data transmitted in a plurality of frames;

classifying each of the frames;

analyzing the classification of a number of successive frames of the received data and providing a metric with respect thereto; and

determining, in response to the metric, if a frame is a discontinuous DTX frame, including reclassifying improperly classified erasure frames to be DTX frames.

24 (currently amended): The invention of [[C]] claim 23 wherein the step of said classifying includes the step of error checking the frames.

25 (currently amended): The invention communications system of [[C]] claim 24 wherein the step of said error checking includes the step of performing a cyclic redundancy check.

26 (currently amended): The invention communications system of [[C]] claim 25 wherein the step of said classifying includes the step of classifying the frames as good frames, erasure frames, or discontinuous DTX frames.

27 (currently amended): The invention communications system of [[C]] claim 26 further including the step of assigning a numerical value to each of the frames based on the classification thereof.

28 (currently amended): The invention communications system of [[C]] claim 27 wherein the step of said classifying includes the step of computing a filter output: $Y_n = Y_{n-1} + X_n$ where 'n' is a frame number, Y_n is the filter output for a given frame n, Y_{n-1} is the filter output for a previous frame, and X_n is a stream of input frames.

29 (currently amended): The invention communications system of [[C]] claim 28 further including the step of setting a threshold for the output Y_n .

30 (currently amended): The invention communications system of [[C]] claim 29 further including the step of outputting an indication of a detection of a discontinuous transmission DTX frame when the filter output exceeds the threshold.

31 (cancel).

32 (currently amended): The invention communications system of [[C]] claim [[31]] 30 wherein the step of said reclassifying improperly classified erasure frames includes the step of changing the frame classification to discontinuous if the frame was classified as erasure and the output of the filter exceeds the threshold.